

REMARKS

Reconsideration of the pending application is respectfully requested on the basis of the following particulars:

Rejection of claims 1, 3, 5-7, 9-11, and 13 under 35 U.S.C. § 103(a)

Claims 1, 3, 5-7, 9-11, and 13 presently stand rejected as being unpatentable over PCT WO 03/003878 (hereafter Poppe '878) in view of Lockwood et al. (U.S. 7,022,726). This rejection is respectfully traversed for at least the following reasons.

It is respectfully submitted that Poppe '878 and Lockwood cannot be combined to form a prima facie case of obviousness of the presently claimed invention. In particular, Applicant submits that Lockwood teaches away from the presently claimed invention. It is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983).

The examiner relies on a reference by Lockwood to crushing foam to promote cell opening, at Lockwood's col. 3, lines 30-35. However, while the examiner states that "Lockwood et al suggested that in order to provide these viscoelastic polyurethanes with an open cell structure it was known in the art to crush the foam to promote cell opening," Lockwood states that "although it is sometimes still possible to achieve cell opening by crushing the foam, this is not always practical and it adds a costly extra step to the process." (*Lockwood*; col. 3, lines 35-38).

Lockwood further states that "there is *a further need for* reactively processable viscoelastic polyurethane and polyurethaneurea foams which, in addition to having all the characteristics noted above over a wide range of foam densities, are predominantly open celled, cover a very wide hardness range, and *do not require crushing*." (*Lockwood*; col. 3, lines 55-60; emphasis added).

Lockwood stresses the desirability to avoid crushing the foam, noting that an advantage of Lockwood's methods of producing foam is that "the cells open spontaneously during normal processing, *and costly post-processing operations such as*

crushing to open the cells are generally not required” (Lockwood; col. 21, lines 51-54; emphasis added), and that the “foams do not require the use of mechanical cell opening techniques such as crushing.” (Lockwood; col. 22, lines 64-65).

A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983). In this regard, it must be appreciated that *each and every reference* that Lockwood makes to crushing to obtain an open cell structure *suggests that crushing is not desirable*. In particular, Lockwood notes that crushing “this is not always practical and it adds a costly extra step.” (Lockwood; col. 3, lines 37-38), and that “there is a further need” to eliminate crushing (see Lockwood; col. 3, lines 55-60).

Lockwood clearly teaches away from using a crushing process to obtain an open cell structure, since Lockwood criticizes and discredits the crushing as being not always practical and as adding a costly extra step. Thus, in view of Lockwood’s disclosure, persons skilled in the art would be discouraged from, and not led to, modifying Poppe ‘878 to arrive at the presently claimed invention wherein in a method for manufacturing a spring body, a viscoelastic foam layer is compressed to break open at least a part of the cells present in the foam.

For at least these reasons, it is respectfully submitted that Poppe ‘878 and Lockwood fail to form a prima facie case of obviousness of the presently claimed invention, and that claims 1 and 3-13 are therefore allowable over the cited references. Accordingly, withdrawal of the rejection is requested.

Rejection of claims 4, 8, and 12 under 35 U.S.C. § 103(a)

Claims 4, 8, and 12 presently stand rejected as being unpatentable over Poppe ‘878 and Lockwood in further view of E.P. 793,932 (hereafter Poppe ‘932). This rejection is respectfully traversed for at least the following reasons.

As an initial observation, Applicant notes that as discussed above, Poppe ‘878 and Lockwood fail to form a prima facie case of obviousness of claims 1, 6, and 10 since these

references cannot be combined to arrive at the presently claimed invention wherein a viscoelastic foam layer is compressed to break open at least a part of the cells in the foam. Accordingly, it is respectfully submitted that claims 4, 8, and 12 are allowable at least due to their dependency from claims 1, 6, and 10, respectively.

Moreover, it is respectfully submitted that Poppe '932 cannot be combined with Poppe '878 and Lockwood to arrive at the invention set forth in claims 4, 8, and 12.

Claims 4, 8, and 12 each set forth that the tubular body is formed with a biconical or almost biconical shape on the outside. The examiner has recognized that "the [Poppe '878 and Lockwood] references taught that one skilled in the art would have provided the spring elements with a cylindrical shape, and not a biconical shape on the exterior of the tubular element." (page 4 of the Office action).

Poppe '878 discloses plural cylindrical tubes 8 (see *Poppe '878*; figure 4) which are glued together in a bundle. After the tubes 8 are glued together to form a bundle, the bundle is divided into shorter parts which comprise a number of glued-together tube or ring shaped bodies (see *Poppe '878*; lines 2-9 of page 2; figure 6).

Poppe '878 notes that "preferably, the tubes are glued together over their entire length" (*Poppe '878*; page 2, lines 14-15), and that "it is made sure that the tube-shaped bodies or rings are glued together in a sufficiently strong manner" (*Poppe '878*; page 2, lines 18-20).

On the other hand, Poppe '932 discloses a foam body "whose outer side narrows/widens from one end to the other" (*Poppe '932*; col. 3, lines 13-14). Moreover, Poppe '932 discloses that an improved narrowing/widening are obtained "by external means, namely a ring 6 or a plate 7." (*Poppe '932*; col. 4, lines 46-47). Referring in particular to Poppe '932's figure 7, several of the bodies 1 are shown held in a plate 7.

While Poppe '878 requires that a plurality of tubular bodies 8 are glued together, and are preferably glued together over their entire length, it is respectfully submitted that the bodies 1 of Poppe '932, due to their narrowing/widening exterior shape, are not suitable to be glued together, since virtually none of the side surfaces of two adjacent

bodies would be in contact with one another if the bodies are placed side-by-side. This can be appreciated with reference to Poppe '932's figure 7, where it can be seen that the narrowing/widening exterior shape precludes the contact required for gluing.

Accordingly, there can be no expectation of success in employing bi-conical tubes in Poppe '878, since tubes having such a shape could not be glued together as Poppe '878 requires.

For at least these reasons, it is respectfully submitted that claims 4, 8, and 12 are allowable over the cited references, and withdrawal of the rejection is requested.

Conclusion

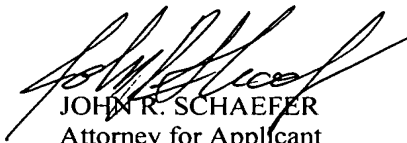
In view of the amendments to the claims, and in further view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is requested that claims 1 and 3-13 be allowed and the application be passed to issue.

If any issues remain that may be resolved by a telephone or facsimile communication with the Applicant's attorney, the Examiner is invited to contact the undersigned at the numbers shown.

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Respectfully submitted,


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